



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35.



Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.

DEPARTMENT OF AUTOMOBILE ENGINEERING

COURSE NAME : 19AUT205 – INTERNET OF THINGS IN AUTOMOTIVE SAFETY

II YEAR /IV SEMESTER

Unit 4- Interfacing of Arduino & ESP8266 with Input / Output Devices

Topic : Node MCU and Serial Communication



1. What is ESP8266
2. What is Analog Sensor?
3. Mention any four Analog sensors.





NODE MCU



- ❖ NodeMCU is an open source firmware for which open source prototyping board designs are available.
- ❖ The name "NodeMCU" combines "node" and "MCU" (micro-controller unit)



SERIAL COMMUNICATION



- Serial communication is a communication method that uses one or two transmission lines to send and receive data
- That data is continuously sent and received one bit at a time



Components



- ❖ NodeMCU WiFi Module
- ❖ Arduino UNO Board
- ❖ Breadboard
- ❖ Jumper Wires



WORKING



- ❖ Connect the RX pin of NodeMCU to the TX pin of Arduino.
- ❖ Also, connect the TX pin of NodeMCU to the RX pin of Arduino.
- ❖ Connect both Grounds of NodeMCU and Arduino
- ❖ Separate Code for Sender in Arduino, Receiver in Arduino is made
- ❖ Upload the code to NodeMCU and Arduino Board.
- ❖ You can transmit your data or variable between it.



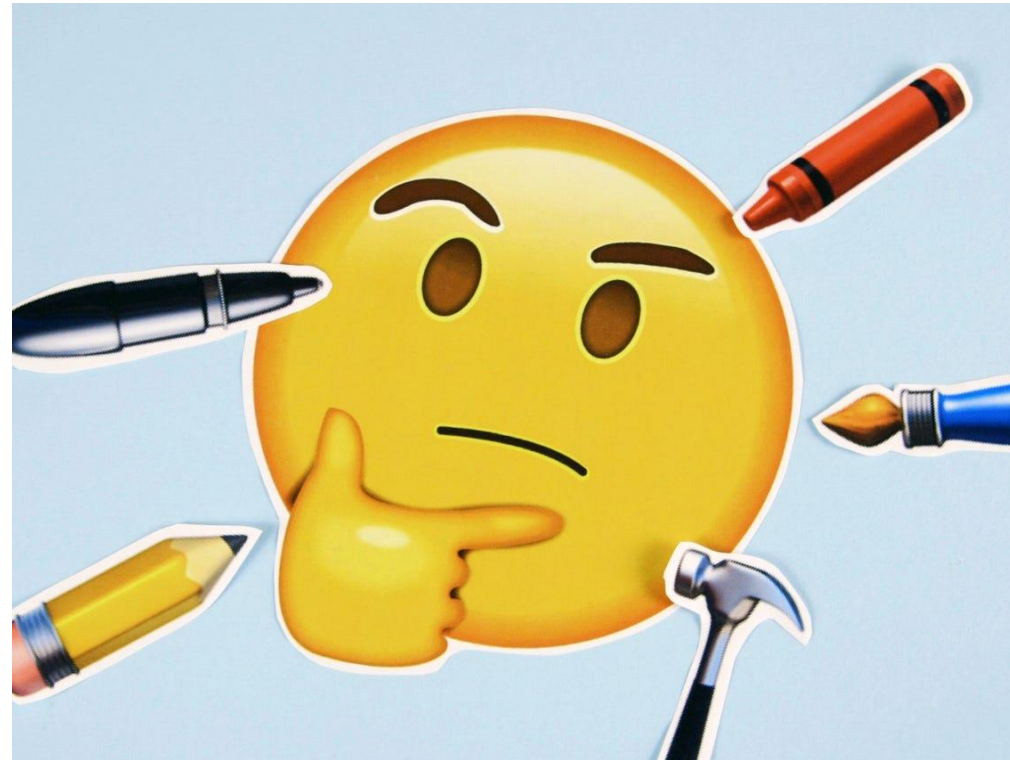
WORKING



<https://www.youtube.com/watch?v=9W6PiPFfVjg>



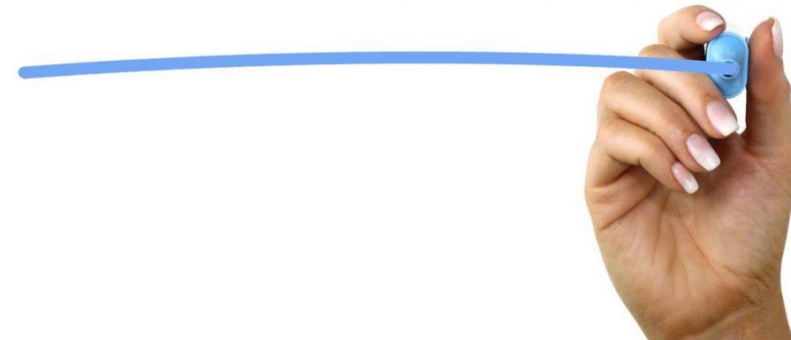
Task





1. What is Node MCU?
2. Mention the components used
3. What is serial communication?

ASSESSMENT





REFERENCE



- ❖ <https://www.youtube.com/watch?v=9W6PiPFfVjg>
- ❖ <https://iot-guider.com/esp8266-nodemcu/serial-communication-between-nodemcu-and-arduino/>



THANK YOU !!!